Andrei Kuzminov

List of Publications by Year
in descending order

50 papers	2,620 citations	279798 23 h-index	197818 49 g-index
50 all docs	50 docs citations	50 times ranked	1972 citing authors

#	Article	IF	Citations
1	Recombinational Repair of DNA Damage in <i>Escherichia coli</i> and Bacteriophage Î». Microbiology and Molecular Biology Reviews, 1999, 63, 751-813.	6.6	836
2	Collapse and repair of replication forks in <i>Escherichia coli</i>. Molecular Microbiology, 1995, 16, 373-384.	2.5	385
3	Potentiation of hydrogen peroxide toxicity: From catalase inhibition to stable DNA-iron complexes. Mutation Research - Reviews in Mutation Research, 2017, 773, 274-281.	5.5	97
4	Annealing <i>vs.</i> Invasion in Phage Î» Recombination. Genetics, 1997, 147, 961-977.	2.9	96
5	Instability of inhibited replication forks inE. coli. BioEssays, 1995, 17, 733-741.	2.5	90
6	Chromosomal fragmentation in dUTPase-deficient mutants of Escherichia coli and its recombinational repair. Molecular Microbiology, 2004, 51, 1279-1295.	2.5	68
7	RdgB acts to avoid chromosome fragmentation in Escherichia coli. Molecular Microbiology, 2003, 48, 1711-1725.	2.5	66
8	RecA-dependent mutants in Escherichia coli reveal strategies to avoid chromosomal fragmentation. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16262-16267.	7.1	58
9	Fragmentation of Replicating Chromosomes Triggered by Uracil in DNA. Journal of Molecular Biology, 2006, 355, 20-33.	4.2	58
10	Replication Forks Stalled at Ultraviolet Lesions Are Rescued via RecA and RuvABC Protein-catalyzed Disintegration in Escherichia coli. Journal of Biological Chemistry, 2012, 287, 6250-6265.	3.4	54
11	Guidelines for DNA recombination and repair studies: Cellular assays of DNA repair pathways. Microbial Cell, 2019, 6, 1-64.	3.2	47
12	Chromosomal Lesion Suppression and Removal in <i>Escherichia coli</i> via Linear DNA Degradation. Genetics, 2003, 163, 1255-1271.	2.9	47
13	Stalled replication fork repair and misrepair during thymineless death in <i>Escherichia coli</i>. Genes To Cells, 2010, 15, 619-634.	1.2	39
14	Patterns of chromosomal fragmentation due to uracilâ€DNA incorporation reveal a novel mechanism of replicationâ€dependent doubleâ€stranded breaks. Molecular Microbiology, 2008, 68, 202-215.	2.5	38
15	Disintegration of Nascent Replication Bubbles during Thymine Starvation Triggers RecA- and RecBCD-dependent Replication Origin Destruction. Journal of Biological Chemistry, 2012, 287, 23958-23970.	3.4	36
16	Homologous Recombinationâ€"Experimental Systems, Analysis, and Significance. EcoSal Plus, 2011, 4, .	5.4	35
17	When DNA Topology Turns Deadly â€" RNA Polymerases Dig in Their R-Loops to Stand Their Ground: New Positive and Negative (Super)Twists in the Replicationâ€"Transcription Conflict. Trends in Genetics, 2018, 34, 111-120.	6.7	35
18	The Precarious Prokaryotic Chromosome. Journal of Bacteriology, 2014, 196, 1793-1806.	2.2	33

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19	The Replication Intermediates in Escherichia coli Are Not the Product of DNA Processing or Uracil Excision. Journal of Biological Chemistry, 2006, 281, 22635-22646.	3.4	32
20	Cyanide, Peroxide and Nitric Oxide Formation in Solutions of Hydroxyurea Causes Cellular Toxicity and May Contribute to Its Therapeutic Potency. Journal of Molecular Biology, 2009, 390, 845-862.	4.2	30
21	RNase HII Saves rnhA Mutant Escherichia coli from R-Loop-Associated Chromosomal Fragmentation. Journal of Molecular Biology, 2017, 429, 2873-2894.	4.2	29
22	Hypothesis. RuvA, RuvB and RuvC proteins: Cleaning-up after recombinational repairs inE. coli. BioEssays, 1993, 15, 355-358.	2.5	28
23	Chromosome demise in the wake of ligaseâ€deficient replication. Molecular Microbiology, 2012, 84, 1079-1096.	2.5	27
24	Synthetic Lethality with the <i>dut</i> Defect in <i>Escherichia coli</i> Reveals Layers of DNA Damage of Increasing Complexity Due to Uracil Incorporation. Journal of Bacteriology, 2008, 190, 5841-5854.	2.2	25
25	Production of clastogenic DNA precursors by the nucleotide metabolism in<i>Escherichia coli</i>. Molecular Microbiology, 2010, 75, 230-245.	2.5	24
26	Static and Dynamic Factors Limit Chromosomal Replication Complexity in<i>Escherichia coli</i>, Avoiding Dangers of Runaway Overreplication. Genetics, 2016, 202, 945-960.	2.9	24
27	Prompt repair of hydrogen peroxide-induced DNA lesions prevents catastrophic chromosomal fragmentation. DNA Repair, 2016, 41, 42-53.	2.8	22
28	Near-continuously synthesized leading strands in <i>Escherichia coli</i> are broken by ribonucleotide excision. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1251-1260.	7.1	21
29	Unraveling the late stages of recombinational repair: Metabolism of DNA junctions inEscherichia coli. BioEssays, 1996, 18, 757-765.	2.5	20
30	Trapping and breaking of in vivo nicked DNA during pulsed field gel electrophoresis. Analytical Biochemistry, 2013, 443, 269-281.	2.4	20
31	The chromosome cycle of prokaryotes. Molecular Microbiology, 2013, 90, 214-227.	2.5	19
32	Chromosomal Replication Complexity: A Novel DNA Metrics and Genome Instability Factor. PLoS Genetics, 2016, 12, e1006229.	3.5	19
33	Replication fork inhibition in <scp><i>seqA</i></scp> mutants of <scp><i>E</i></scp><i>scherichia coli</i> triggers replication fork breakage. Molecular Microbiology, 2014, 93, 50-64.	2.5	18
34	Cyanide enhances hydrogen peroxide toxicity by recruiting endogenous iron to trigger catastrophic chromosomal fragmentation. Molecular Microbiology, 2015, 96, 349-367.	2.5	18
35	Reduced lipopolysaccharide phosphorylation in <i>Escherichia coli</i> lowers the elevated ori/ter ratio in <i>seqA</i> mutants. Molecular Microbiology, 2009, 72, 1273-1292.	2.5	17
36	The<i>mutT</i>Defect Does Not Elevate Chromosomal Fragmentation in<i>Escherichia coli</i>Because of the Surprisingly Low Levels of MutM/MutY-Recognized DNA Modifications. Journal of Bacteriology, 2007, 189, 6976-6988.	2.2	15

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37	Inhibition of DNA synthesis facilitates expansion of lowâ€complexity repeats. BioEssays, 2013, 35, 306-313.	2.5	15
38	Low-Molecular-Weight DNA Replication Intermediates in Escherichia coli: Mechanism of Formation and Strand Specificity. Journal of Molecular Biology, 2013, 425, 4177-4191.	4.2	12
39	Exopolysaccharide defects cause hyper-thymineless death in <i>Escherichia coli</i> via massive loss of chromosomal DNA and cell lysis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 33549-33560.	7.1	11
40	Degradation of RNA during lysis of Escherichia coli cells in agarose plugs breaks the chromosome. PLoS ONE, 2017, 12, e0190177.	2.5	11
41	Ultraviolet-induced RNA:DNA hybrids interfere with chromosomal DNA synthesis. Nucleic Acids Research, 2021, 49, 3888-3906.	14.5	10
42	Thymineless Death in <i>Escherichia coli</i> Is Unaffected by Chromosomal Replication Complexity. Journal of Bacteriology, 2019, 201, .	2.2	9
43	Sources of thymidine and analogs fueling futile damage-repair cycles and ss-gap accumulation during thymine starvation in Escherichia coli. DNA Repair, 2019, 75, 1-17.	2.8	7
44	Catalase inhibition by nitric oxide potentiates hydrogen peroxide to trigger catastrophic chromosome fragmentation in <i>Escherichia coli</i>. Genetics, 2021, 218, .	2.9	5
45	Oxidative damage blocks thymineless death and trimethoprim poisoning in Escherichia coli. Journal of Bacteriology, 2021, , JB0037021.	2.2	5
46	Pulsed-field gel electrophoresis does not break E.Âcoli chromosome undergoing excision repair after UV irradiation. Analytical Biochemistry, 2017, 526, 66-68.	2.4	4
47	Electron Microscopy Reveals Unexpected Cytoplasm and Envelope Changes during Thymineless Death in Escherichia coli. Journal of Bacteriology, 2021, 203, e0015021.	2.2	2
48	Nitric oxide precipitates catastrophic chromosome fragmentation by bolstering both hydrogen peroxide and Fe(II) Fenton reactants in E.Âcoli. Journal of Biological Chemistry, 2022, 298, 101825.	3.4	2
49	Halfâ€Intercalation Stabilizes Slipped Mispairing and Explains Genome Vulnerability to Frameshift Mutagenesis by Endogenous â€œMolecular Bookmarksâ€. BioEssays, 2019, 41, 1900062.	2.5	1
50	Thymineâ€starvationâ€induced chromosomal fragmentation is not required for thymineless death in <i>Escherichia coli</i>. Molecular Microbiology, 2022, , .	2.5	0